

Title (en)
AUTOMATIC EXCAVATION CONTROL SYSTEM.

Title (de)
AUTOMATISCHES BAGGERSTEUERSYSTEM.

Title (fr)
SYSTEME DE COMMANDE AUTOMATIQUE D'EXCAVATION.

Publication
EP 0486491 B1 19940921

Application
EP 89912822 A 19891026

Priority
• US 8904730 W 19891020
• US 39491989 A 19890817

Abstract (en)
[origin: WO9102853A1] A control system (10) and method automatically controls a work implement (12) of an excavating machine (14) to perform a complete excavation work cycle. In performing the work cycle, the control system (10) automatically extends the work implement (12) down into the trench, completes a dig stroke, captures the excavated material, swings the work implement (12) to dump, dumps the load, returns the work implement (12) to the trench, and repeats the work cycle until a trench is excavated according to operator programmed specifications. The control system (10) monitors the position of the work implement (12) and the forces exerted on the work implement (12) and controllably actuates the work implement (12) according to predetermined position and force setpoints.

IPC 1-7
E02F 9/20; **E02F 9/22**; **E02F 3/43**; **E02F 3/84**; **E02F 3/32**

IPC 8 full level
E02F 3/43 (2006.01); **E02F 9/20** (2006.01)

CPC (source: EP US)
E02F 3/437 (2013.01 - EP US); **E02F 3/438** (2013.01 - EP US)

Cited by
CN110344467A; CN112392080A; CN111670286A; EP3748089A4

Designated contracting state (EPC)
BE DE FR GB IT

DOCDB simple family (publication)
WO 9102853 A1 19910307; AU 4529689 A 19910403; BR 8907900 A 19920414; CA 2020234 A1 19910218; CA 2020234 C 20000530; DE 68918464 D1 19941027; DE 68918464 T2 19950511; EP 0486491 A1 19920527; EP 0486491 B1 19940921; JP 2793360 B2 19980903; JP H04507271 A 19921217; US 5065326 A 19911112

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